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Family agriculture and sustainable standards in oil palm sector. The exemple of Ivory Coast and Cameroon

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Environmental concerns : toward New standard ?

- RSPO (Roundtable on sustainable Palm oil) :
 - Global Multi-stakeholder initiative (plantation companies, industry, retailers, environmental and social NGOs, etc.)
 - To define a standard (Criteria, indicators) on sustainable palm oil + certification
 - Elaborated a compromise : forest conservation / intensification of yields (Principle 3)
 - Family farms did not participate on that standard definition. There are criteria on social issues, but family farmers were not considered in their technical management system.

Characteristics of the historical development model

- Predominance of « Estate models »
 - Smallholders contracted with central industrial oil mill,
 - were committed to respecting farm management standards that maximized yields,
 - and to supplying all production to the oil mill (one buyer : the mill).
 - > Model provided information and capital but it was also a source of tensions between estate production standards and the family production logics.

Privatization (1995) :

- Open and free access to oil palm seeds and plants for family farms : boom in family farm plantation areas
- Generated a set of changes that rendered the system insecure (international market prices fluctuations, etc.)



Risk limitation strategies : diversification + taking advantage of the local market demand (non-industrial red palm oil) not affected by international market / oligopolistic market

Local small-scale processing



Previous cover crop, deforestation ?

- In Ivory Coast: family farms started set up oil palm plantation at the end of coffee-cocoa cycle : the plantation primarily replaced old coffee and cocoa plantings.
 - executive category planting large areas (middle and senior executives), oil palm remained a crop that led to deforestation (Naï Naï *et al.*, 2000).
 - family farmers and the junior executive category (living in the village) : palm oil to bring fallow back into production, and for replanting after cocoa and coffee.

Oil palm production on family farms: a diversification choice

- 2 different logics:

- Industrial one, based on profitability and standardization:

- Monoculture, yields intensification, economies of scales, large capacity oil mills, out growers “supervised” to respect estate “norms”)

- Local one, oriented toward security and heritage, and based on diversification of resources, and risk limitation strategies.

- Diversity of planting materials, of crop management sequences and search for diversifying trading possibilities

Often described as a “deviation from the norm” (industry point of view)

Although less “intensive”, they are based on other logics / rationality

- Family farms adopt palm oil as an income diversification source, not as a monoculture – (palm oil + coffee/cocoa, rubber, cash crops)
- Family farms also intercrop juvenile oil palms with other crops during the first 4 years after oil palm planting. (Rafflegeau & Ndigui, 2001).

This is not recommended by technical project managers (“it limits oil palm productivity”) – but farmers do not reason in term of profitability of a single crop.

Gap between industrial norm and logic internal to the farm

Intercropping advantages :

Food crops in juvenile palm oil plantation can be carried out by the farmer himself or by other village people seeking land (where pressure on land):

- This help in plot preparation (the area cleared is used for holing).
- Then, once planting was completed, the young oil palm plants benefited from upkeep carried out for the food crop with which they co exist.
- Benefits from the inputs provided by the intercrop (as with pineapple).
- Benefits from an interesting labor contract (sharecropping with the laborer planting food crops),
- Enables farmers to diversify their income,

Concrete ex. of strategy / financial investment constraints or labor constraints, in a context of limited resources

Diversification satisfies several requirements:

- Feeding the household,
- Coping with defective markets,
- Limits the risk of income lost in case of internal or external shocks.
 - limit the risk of income lost particularly because there is a dependency on pricing factors that are fixed on other markets.
 - spread income over the year with different crops
 - Insurance (like credit) is inaccessible : diversification makes it possible to manage the risk of field losses.

- > Lead to crop management that are necessarily less productive than a single intensive crop.
- > Rationality is oriented toward the profitability of the farm as a whole and its perpetuation, then its development.

Diversity of technical management systems

- Planting unselected seeds was a strategy for getting young farmers to start without capital
- Substitution of chemical fertilizers with compost made by farmers,
- Reduction or increase in the space between palms,
- Fragmentation of plots.

Limited access to capital lead to minimum investment strategies:

- Managing one's own nursery,
- Planting on fallow (avoiding the cost of forest clearance),
- First growing food crops before planting palm oil to stagger costs of setting up the plantation,
- Food crop intercropping, i.e. to fund the palm oil cost,
- Opportunities offered by the local market

Conclusion

- Family farms are also technical players who adapt their practices to their constraints and opportunities
- Tensions between 2 different logics:
Standardization-economies of scales / diversification + risk limitation

- It is perilous to consider that family plantations and estate belong in the same normative group, their realities differ:
 - Lead to prior analysis of family farm rationality
 - Not sure that smallholder and estate areas raise the same environmental problem (diversified small agriculture / large monoculture areas : do they fit the same stake on biodiversity ?)
 - Not sure that standards adopted by estate to reduce their pressure on the environment will correspond to reality of family farms
 - Past experience has shown that standard for estate monoculture do not fit into family farm logic
 - Avoid the stalemates arising from attempt to « bring family farms up to industrial standard ».

- Family farm associations : target the international forum / take part in the debate on agriculture and trade policies.
- Agricultural research traditionally oriented in oil palm sector toward improving yields and techniques on estates
 - > to integrate family agriculture logics, such as intercropping, agro-forestry systems, variety selection toward local food market (red oil), etc.